Claims

1. An electrical component with a substrate (SU) comprising the terminal contacts (ANK) for electrical component structures (BS) on a main surface,

with a cover (AD), comprising the terminal pads (AF) and electrical throughplatings (D) with said connected outside contacts (AUK),

in which the cover is located on the main surface and in which the electrical connection is made between the terminal contacts on the undersurface of the cover via cavities (KV) completely filled with conductive adhesive (LK), which are arranged between the substrate and cover.

2. A component as defined in Claim 1,

in which the cavities (KV) are cut from one outer edge of the component (BE) or at least are provided in the direct vicinity of an outer edge.

3. A component as defined in Claim 1 or 2,

in which between the substrate (SU) and the cover (AD) an interface layer is provided in which the cavities (KV) are formed.

4. A component as defined in one of the Claims 1 to 3,

in which an enclosed frame structure (RS) is provided between the substrate (SU) and the cover (AD) in the area of the outer edge, which comprises limited recesses which point towards the inside, above and below from the substrate and cover, which show the aforesaid cavities (KV).

5. A component as defined in Claim 4

- in which the frame structure (RS) encloses the component structures (BS),
- in which the terminal contacts (ANK) are provided outside the frame structure,
- in which the substrate (SU) and cover (AD) each are seated flat on one side of the framed structure, so that an enclosed cavity (HR) is formed which accommodates the component structures.

6. A component as defined in one of the Claims 1 to 5,

in that the cover (AD) at least is a dielectric layer (DS) comprising the carrier, in which circuit elements comprising the structured metallizations (ML) are provided on or between the dielectric layers.

7. A component as defined in one of the Claims 1 to 6,

in which the conductive adhesive (LK) is a reaction resin, which hardens at low temperatures and is filled with electrically conducting particles.

8. A process for producing a component

- in which on a substrate (SU) several component regions are provided for a component (BE), which respectively comprise component structures (BS) and terminal contacts (ANK),
- in which the substrate and a cover (AD), which on one side comprises electrical terminal pads (AF) corresponding to the terminal contacts, are so fitted above each other that the terminal pads and contacts are located opposite one another in cavities (KV),
- in which the cavities of several component regions are connected via channels (CH),
- in which a conductive adhesive (LK) is injected into the channels until all cavities are filled with conductive adhesive, in which an electric contact is created between the terminal contacts and the corresponding electrical terminal pads,
- in which per component region a component is separated, in which the electrical connection between the cavities is separated.

9. Process as defined in Claim 8,

- in which a frame structure (RS) is provided between the substrate (SU) and the cover (AD) per component region, which encloses the component region, in which only the terminal contacts (ANK) are provided outside the enclosed frame structure (RS),
- in which the channels (CH) are created between the frame structures of adjacent component regions and are enclosed above and below the substrate and cover.

10. A process as defined in Claim 8 or 9,

in which a reaction resin filled with electrically conducting particles is used as conductive adhesive (LK).

11. A process as defined in one of the Claims 9 or 10,

in which the frame structure (RS) is produced by structuring a photoresist, which in advance is applied in large areas onto one or both of the opposite surfaces of the substrate (SU) and cover (AD).

12. A process as defined in one of the Claims 9 to 11,

in which the frame structure (RS) is produced on a surface of a substrate (SU) or the cover (AD), and is bonded with the cover or the substrate, or in which on both surfaces corresponding frame structures (RS) are produced and glued together.

13. A process as defined in one of the Claims 9 to 12,

in which the frame structures (RS) are planarized prior to being placed above each other, so that the upper edges of all frame structures is located on the same level.

14. A process as defined in one of the Claims 8 to 13,

in which the conductive adhesive (LK) is injected under pressure into the channels (CH).

15. A process as defined in one of the Claims 8 to 14,

in which the separation is performed by means of sawing, in which the saw cuts are performed parallel to the channels (CH), in which the cavities (KV) of each channel are so cut that the conductive adhesive (LK) exclusively remains in the cut cavities, but in the channels said cavities are separated or removed during the sawing process.

16. A process as defined in one of the Claims 8 to 15,

in which at least the cutting edges of the frame structure (RS) are sealed with a coating.

17. A process as defined in Claim 16,

in which after the separation the coating is produced by means of the application of varnish or chemical vapor disposition.

18. A process as defined in one of the Claims 8 to 17,

in which the cavities (KV) per component region are provided only at one longitudinal edge in which the channels (CH) are provided parallel to this longitudinal edge and essentially run in a straight line within the configuration consisting of substrate (SU) and cover (AD).

19. A process as defined in one of the Claims 8 to 18,

in which a first saw cut with relatively large cutting width (SB1) is performed from the substrate (SU) or the cover (AD) parallel to the channel (CH), that the cavities (KV) filled with the conductive adhesive (LK) are separated electrically from one another and the channel is opened at the top, in which the opened channel is filled with insulating material (IM), in which subsequently a second continuous saw cut is made with relatively low cutting width (SB2), in which the saw cut is made at a distance to the opened cavities in the first saw cut.

20. A process as defined in Claim 19,

in which the open channel is not completely filled with an insulating material (IM), and in which only one layer of an insulating material (IM) is deposited or applied.

21. A process as defined in one of the Claims 8 to 20,

in which a printed circuit board made of synthetic material is used as cover (AD), and in which prior to the separation a thermal mechanically adjusted synthetic layer is so applied to the back of the substrate (SU) that a symmetric layered structure is obtained in terms of the thermal expansion characteristics.